		CONTRACT ID CODE	PAGE OF PAGES		
AMENDMENT OF SOLICITATION/M				1 5	
2. AMENDMENT/MODIFICATION NO. 129	3. EFFECTIVE DATE See Block 16C	4. REQUISIT	ION/PURCHASE REQ. NO.	5. PROJECT NO. (If applical	ble)
6. ISSUED BY CODE		7. ADMINIST	ERED BY (If other than Item 6)	CODE	
John F. Kennedy Space Center, N Procurement Office – ODIN – OP- Kennedy Space Center, FL 32899	OS-ODIN				
8. NAME AND ADDRESS OF CONTRACTOR (No.,	street, county, State, and Zip Co	ode) (x)	9A. AMENDMENT OF SOLIC	ITATION NO.	
			9B. DATED (SEE ITEM 11)		
OAO Corporation					
7375 Executive Place			10A. MODIFICATION OF CONTRACT/ORDER NO.		
Seabrook, MD 20706-2278			NAS5-98144/CC90303B		
CODE	TY CODE		10B. DATED (SEE ITEM 13)		
CODE FACILI 11. THIS ITEM ONLY APPLIES TO AMENDMENTS			December 1, 200)1	
Offers must acknowledge receipt of this amendment (a) By completing Items 8 and 15, and returning By separate letter or telegram which includes a refere THE PLACE DESIGNATED FOR THE RECEIPT OF virtue of this amendment you desire to change an offereference to the solicitation and this amendment, and 12. ACCOUNTING AND APPROPRIATION DATA	copies of the amendment; (b) E ince to the solicitation and amen OFFERS PRIOR TO THE HOUF er already submitted, such chang is received prior to the opening	By acknowledging Idment numbers. R AND DATE SP ge may be made	receipt of this amendment on ea FAILURE OF YOUR ACKNOW! ECIFIED MAY RESULT IN REJE by telegram or letter, provided ea	ach copy of the offer submitted; LEDGEMENT TO BE RECEIVE CCTION OF YOUR OFFER. If b	D AT
13. THIS ITEM APPLIES ONLY TO MODIFICATION	S OF CONTRACTS/OPDEDS I	T MODIEIES THI	E CONTRACT/ORDER NO. AS I	DESCRIBED IN ITEM 14	
A. THIS CHANGE ORDER IS ISSUED PUR NO. IN ITEM 10A.					RDER
B. THE ABOVE NUMBERED CONTRACT/ appropriation date, etc.) SET FORTH IN ITE				s changes in paying office,	
X C. THIS SUPPLEMENTAL AGREEMENT IS NAS5-98144 Contract Clau Terms and Conditions-Cor D. OTHER (Specify type of modification and	se C.7 Technology R nmercial Items, (c) Cl	efreshment		ause 52.212-4 Contra	act
	7		4		
E. IMPORTANT: Contractor [] is not, [X 14. DESCRIPTION OF AMENDMENT/MODIFICATION OF AMENDMENT					
Stennis Space Center	- ODIN SERVI	ICES	,	,	
Technology Infrastructures: Incorpora	MON OF 7 SWRS PIEVIO	usiy Approv	ed Ottilizing Fast Hack	Approvai Process	
Change in Delivery Order Price: \$21,	936.78 (INCREASE)				
Except as provided herein, all terms and conditions o	f the document referenced in Ite				fect.
15A. NAME AND TITLE OF SIGNER (Type or print)			ND TITLE OF CONTRACTING O	FFICER (Type or print)	
Keith L. Spencer Sr. Contracts Manager			oe A. Ebright cting Officer		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED	STATES OF AMERICA	16C. DATE SIGNED)
		BY			
(Signature of person authorized to sign)			gnature of Contracting Officer)		
NSN 7540-01-152-8070	30-	-105	STANDA	RD FORM 30 (Rev. 10-83)	

 In accordance with Master Contract NAS5-98144, C.7, Technology Refreshment Process, the technology refreshment services referenced below is hereby incorporated into this Delivery Order at a fixed price of \$21,936.78. These infrastructure upgrades were previous approved in accordance with Item 22, "Fast-Track Infrastructure Upgrade Proposal (IUP) Process".

	Fast Track		_
SWR #	Approval Date	Subject	Amount
LS02 DATA 03	6/23/04	Install Cat5e wiring in B5100, room M230 for LMTO	\$1,094.67
MDS0 2003 02	7/7/04	Install GFE 12-strand multimode fiber cable from B1200 to B1201 to support CCTV for NASA security	\$3,115.50
NJ00 L4AF 00	7/7/04	Install new 4-pair Cat3 wiring in room 200, B1000 to replace existing 25-pair Cat3 wiring for NAVOCEANO	\$3,005.18
NJOO LAAT OO	7/1/04	Install Cat5 wiring in rooms 147A, 148, 148A, 148B, 148C and 148D to support	ψ3,003.10
NJ00 L4AJ 00	6/17/04	networks fro NMCI in B1210	\$9,139.11
NJ00 L4AN 00	7/7/04	Install T1AX and T1 transceiver circuit cards in UMC in B1201 and B1000 to support extending (2) circuits from B1201 to B1000	\$2,713.78
D202 4242 F0	6/47/04	Relocate (3) equipment cabinets in room 116, B1201 to allow for expansion of	. ,
P203 4212 F9	6/17/04	PointSpan for NASA	\$1,445.76
XJDE 4492 00	5/27/04	Repair of 25-pair underground copper cable at alternate guard gate by B4302	\$1,422.78
		TOTAL	\$21,936.78

2.SWR LS02 DATA 03

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to install (4) Cat5e wires to room M230 for LMTO in B5100 to be used for LMTO networks as outlined in OAO proposal dated May 20, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
- (1) Install (4) Cat5e wires to (1) location in room M230.
- (2) Install (2) each white Cat5e jacks on (2) of the wires.
- (3) Install (2) each gray Cat5e jacks on (2) of the wires.
- (4) Install all 4 jacks in (1) faceplate.
- (5) Terminate the other end of the (4) wires in existing patch panel in room M245.
- (6) Test and label both ends.
- (7) Provide OAO with a redline drawings showing jack numbers and location.
- b. The contractor shall provide the following material:
 - (1) 1,000 feet of Berk-Tek Cat5e plenum wire (CMP-00424LAN-6U-01)
 - (2) 2 each Ortronics Trac jack white (248920)
 - (3) 2 each Ortronics Trac jack gray (248938)
 - (4) 1 each Ortronics Trac jack faceplate (189457)

c. Schedule: The completion of this effort shall be (4) four weeks after receipt of Fast Track approval (June 23, 2004)

3. SWR MDS0 2003 02

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to install GFE 12-strand multimode fiber cable from 1200 to B1201 to support CCTV for NASA security as outlined in OAO proposal dated May 25, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
- (1) Install (1) GFE 12-strand multimode fiber cable from room 116 in B1201 to room 105E in B1201.
- (2) Install (1) ST connector on each strand of fiber in each building.
- (3) Test and label at both ends.
- b. The contractor shall provide the following material:
- (1) 2 each cool cure consumables (142172)
- (2) 2 each P2020C-C-125 multimode ST connectors (170290)
- c. NASA will provide the following material:
- (1) 900 fe4et GFE 12-strand multimode fiber cable (370-062-ALTOSLST-12)
- d. Schedule: The completion of this effort shall be (8) eight weeks after receipt of Fast Track Approval (July 7, 2004)

4. SWR NJ00 L4AF 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to install new 4-pair Cat3 wiring to replace existing 25-pair Cat3 wiring for NAVOCEANO as outlined in OAO proposal dated May 18, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Install new Cat3 wiring to (11) locations in room 200 since the old 25-pair cables under the computer floor aren't long enough to be moved into room 211A.
 - (2) Install new RJ11 biscuit jacks on the end of each 4-pair Cat3 wire being installed in item (1) above.
 - (3) Remove old wiring once existing lines have been cutover to new jacks.
 - (4) Provide redline drawing to OAO draftsman to update site drawings
- b. The contractor shall provide the following material:
 - (1) 1,000 feet of Avaya plenum Cat3 wire (CMP-00424MAX-3U)
 - (2) 11 each RJ11 surface mount jacks (059477)
- Schedule: The completion of this effort shall be (6) six weeks after receipt of Fast Track Approval (July 7, 2004)

5. SWR NJ00 L4AJ 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to install Cat5 wiring in rooms 147A, 148, 148A, 148B, 148C and 148D to support networks for NMCI in B1210 as outlined in OAO proposal dated April 29, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for the performance of the following tasks:
- (1) Install (2) Cat5 wires to (11) locations in room 147A and terminate in dual Cat5 iacks.
- (2) Install (2) Cat5 wires to (6) locations in room 148 and terminate in dual Cat5 jacks.
- (3) Install (2) Cat5 wires to (1) location in room 148A and terminate in dual Cat5 jacks.
- (4) Install (2) Cat5 wires to (1) location in room 148B and terminate in dual Cat5 jacks.
- (5) Install (2) Cat5 wires to (4) location in room 148C and terminate in dual Cat5 jacks.
- (6) Install (2) Cat5 wires to (4) location in room 148D and terminate in dual Cat5 jacks.
- (7) Install (1) 48-port Cat5 patch panel in cabinet 5 in room 149 and terminate Cat5 wires.
- (8) Install (1) 24-port Cat5 patch panel in cabinet 5 in room 149 and terminate Cat5 wires.
- (9) Install Caddy clips in walls to accept faceplates and jacks.
- (10) Install 4" EMT conduit from ceiling down to cabinet 5 to provide route for wiring into cabinet.
- (11) Provide (54) 7 feet Cat5 patch cords for NMCI technician to make connection from network switch to station patch panel.
- (12) Provide (27) 15 feet Cat5 station cords for NMCI technician to make connection from network jack to PC.
- (13) Provide (27) 25 feet Cat5 station cords for NMCI technician to make connection from network jack to PC.
- b. The contractor shall provide the following materials:
- (1) 6,000 feet of Belden Data Twist Five (CMP-00424BEL-5U-06)
- (2) 54 each Ortronics 7 feet Cat5e patch cords (MM07-OR6C-06)
- (3) 27 each Ortronics 15 feet Cat5e station cords (MM15-OR6C-06)
- (4) 27 each Ortronics 25 feet Cat5e station cords (MM25-OR6C-06)
- (5) 27 each Ortronics dual 568A/B Cat5e jacks (248945)
- (6) 12 each Ortronics faceplate (148025)
- (7) 12 each Caddy clips (157703)
- (8) 2 each 4" connector compression fitting
- (9) 2 each 4" bushing for 4" EMT conduit
- (10) 1 each 4" EMT conduit
- (11) 1 each Ortronics 48-port Cat5e patch panel (269934)
- (12) 1 each Ortronics 24-port Cat5e patch panel (269933)
- c. Schedule: The completion of this effort shall be (8) eight weeks after receipt of Fast Track Approval (June 17, 2004).

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to install T1AX and T1 transceiver circuit cards in UMC in B1201 and B1000 to support extending (2) circuits from B1201 to B1000 as outlined in OAO proposal dated June 10, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for the performance of the following tasks:
- (1) Install T1 transceiver circuit cards in UMC chassis in room 106 of B1201.
- (2) Install (1) T1AX circuit cards in UMC chassis in room 110 of B1000.
- (3) Install (1) new T1AX circuit card in UMC chassis in room 106 of B1201.
- (3) Install (1) GFE T1AX circuit card in UMC chassis in room 110 of B1000.
- (4) Make cross connects in room 110 of B1000 to extend T1 circuits up to room 211.
- (5) Test and label at B1201 and B1000.
- b. The contractor shall provide the following materials:
- (1) 2 each T1AX circuit cards (0110-0193)
- (2) 1 each T1 Transceiver card (0120-0123)
- c. Schedule: The completion of this effort shall be (6) six weeks after receipt of Fast Track Approval (July 7, 2004).

7. SWR P203 4212 F9

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to relocate (3) equipment cabinets in room 116 to allow for expansion of PointSpan for NASA as outlined in OAO proposal dated June 4, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for the performance of the following tasks:
- (1) Install (1) section of flextray from existing flextray to new location where cabinets are being relocated.
- (2) Add stanchions under computer floor to replace existing I-beams that held up old equipment cabinet.
- (3) Relocate Cat6 patch panels from the top of the 3 existing cabinets to the bottom to allow enough slack to relocate cabinets without having to run new wiring.
- (4) Relocate (3) new equipment cabinets about 4 feet.
- b. The contractor shall provide the following materials:
- (1) 4 each 8" L brackets (217074)
- (2) 4 each stanchion clamps (216883)
- (3) 1 each Flextray 2" x 8' x 10' (174337)
- (4) 1 each Flextray Z bracket (174353)
- c. Schedule: The completion of this effort shall be (1) one week after receipt of Fast Track Approval (June 17, 2004).

8. SWR XJDE 4492 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to repair 25-pair copper cable at alternate guard gate by B4302 for NASA as outlined in OAO proposal dated May 24, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for the performance of the following tasks:
- (1) Emergency repair to 25-pair buried copper cable that feeds alternate guard gate at B4302.
- (2) Install (1) 25-pair copper cable approximately 75 feet thru GFE provided 3/4" PVC conduit under new driveway being constructed to viewing stand.
- (3) Make 25-pair splice on both ends.
- (4) Place each splice in an underground splice case.
- (5) Replace existing cable marker that was found behind alternate guard house.
- b. The contractor shall provide the following materials:
- (1) 70 feet of 25-pair filled copper cable (E-002524-DFC)
- (2) 2 each 3M 710D1-25 splice modules
- (3) 2 each XAGA splice case (132807)
- (4) 1 each 3M encapsulant (105543)
- (5) 1 each 3M grounding braid kit (084446)
- c. Schedule: The completion of this effort shall be (1) one day after receipt of Fast Track Approval (May 27, 2004).
- 9. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$21,936.78 for this infrastructure upgrade:

ESTIMATED TOTAL (Contract Item 4) (through Mod 129)

Ordered Seats and Services	\$ 11,711,194.82
Catalog Actuals	\$ 702,085.55
Specialized Services Actuals	\$ 224,771.68
Infrastructure upgrades	\$ 3,432,413.99
Fast Track Mods Authorized	\$ 1,094.67
Subtotal	\$ 16,071,560.71
Less credits	\$ (2,625.55)
Less retainage not earned	\$ (33,905.56)
Subtotal	\$ 16,035,029.60
Seats/service levels projected through 11/30/04	\$ 1,963,092.05
Total Estimated Delivery Order Value	\$ 17,998,121.65

10. Part V "Technology Infusion (Infrastructure Upgrades)", Item 2 is modified to include the subject infrastructure upgrades. The signed date and completion date will be completed in a future infrastructure upgrade modification.

	2	Date	Date	
Mod	Description	Signed	Completed	Amount
129	LS02 DATA 03 Install Cat5e wiring in B5100,			#4 004 07
	room M230 for LMTO			\$1,094.67
129	MDS0 2003 02 Install GFE 12-strand			
	multimode fiber cable from B1200 to B1201 to			.
	support CCTV for NASA security			\$3,115.50
129	NJ00 L4AF 00 Install new 4-pair Cat3 wiring in			
	room 200, B1000 to replace existing 25-pair			
	Cat3 wiring for NAVOCEANO			\$3,005.18
129	NJ00 L4AJ 00 Install Cat5 wiring in rooms			
	147A, 148, 148A, 148B, 148C and 148D to			
	support networks fro NMCI in B1210			\$9,139.11
129	NJ00 L4AN 00 Install T1AX and T1			
	transceiver circuit cards in UMC in B1201 and			
	B1000 to support extending (2) circuits from			
	B1201 to B1000			\$2,713.78
129	P203 4212 F9 Relocate (3) equipment cabinets			
	in room 116, B1201 to allow for expansion of			
	PointSpan for NASA			\$1,445.76
129	XJDE 4492 00 Repair of 25-pair underground			
	copper cable at alternate guard gate by B4302			\$1,422.78

- 11. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4: Commercial Items (May 1997) (Modified).
- 12. Reporting requirements: The contractor shall provide monthly status reports to the SSC Alternate DOCOTR, with a copy to the DOCO. These reports shall include, as a minimum, installation progress, and potential problem areas.
- 13. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustments attributable to such facts or circumstances giving rise to these changes.
- 14. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.